Plants bred to survive freezing temperatures could save crop harvests from destruction

Researchers from The University of Western Australia have found that an enzyme in plants, ATP Synthase, plays a critical role in how plants respond to the cold. The discovery, published in *New Phytologist*, could be used to produce frost-resistant crops, which would save the agricultural industry millions of dollars every year.

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The finding has led to new revelations about plant responses to temperature. Dr Sandra Kerbler, from UWA and PEB said the benefits of understanding a crucial enzyme for energy production being so sensitive to cold was of great use to the agricultural industry and to the future of producing frost-resistant crops.

“The research has changed previous thoughts of how plants cope with temperature stress and has highlighted new angles for investigation,” Kerbler said.

“A better understanding of how a plant’s energy production is altered in response to changing temperatures could inform how we breed plants that are more adaptive to climate change.”

Read full, original article: Understanding Enzyme Could Help Produce Frost-Resistant Crops